

Governor's Advisory Council on Literacy

INTERIM REPORT

April 1989

MO DEPOSITORY
DATE JAN 5 1990

Roy Blunt, Chairman
Missouri Secretary of State

Dr. Robert Bartman, Vice Chairman
Commissioner of Elementary and Secondary Education

Governor's Advisory Council on Literacy Members

Bruce Anderson, Foundation
Jerald Andrews, Educator
Robert Bell, Business/Labor
Roseann Bentley, Educator
Honorable Marion Cairns, Government
Ray Canady, Business/Labor
John Carlson, Business/Labor
Janis Cole, Literacy Provider
Michael Crawford, Educator
Walter Diggs, Business/Labor
Honorable David Doctorian, Government
Mae Duggan, Foundation
Dorothy Elliott, Librarian
Mike Hartman, Government
B. Ray Henry, Educator
Robert Hyland, Media
Monteria Hightower, Librarian
Elsie Isensee Hill, Literacy Provider
Gene Howes, Literacy Provider
Jerry Hunter, Government
Chuck James, Business/Labor
Randy Jennings, Business/Labor
Michael Jensen, Media
Honorable Sandra Kauffman, Government
Robert Kelley, Business/Labor
John Kuttler, Agriculture

Dean Hubbard, Educator
Tom Lasley, Media
Elvin Long, Government
William Mann, Educator
Al Manning, Educator
Marguerite Martinez, Literacy Provider
David McMahon, Attorney
Dick Moore, Government
Honorable Annette Morgan, Government
Howard Parker, Literacy Provider
William Pedace, Business/Labor
Honorable Barbara Potts, Government
David Pringle, Business/Labor
Christine Reilly, Foundation
Amy Rome, Foundation
Drew Roy, Business/Labor
Diana Schmidt, Foundation
Jewell Smith, Librarian
David Spencer, Agriculture
Linda Stephens, Literacy Provider
Linda Talbott, Foundation
Joyce Thomas, Educator
Avis Tucker, Media
Terrance Ward, Business/Labor
Gerald Wichman, Business/Labor

Ben Sells, Executive Director
c/o Secretary of State's Office
P.O. Box 778
Jefferson City, Missouri 65102
(314) 751-2379

Floyd Gilzow, Senior Advisor
Mark Vogel, Assistant Director
Craig Thompson, Editor

INTRODUCTION

Failure to address Missouri's illiteracy problems will limit everyone's economic future. Eleven percent of Missouri's adult population or 365,000 citizens have been classified as functionally illiterate. Regardless of their education level or economic well-being, no Missourian is insulated from the road block to our state's success in the 1990's and into the 21st century.

The Interim Report of the Governor's Advisory Council on Literacy proposes 28 Action Plans to address the problem of illiteracy, including:

- *Placing greater emphasis on early childhood education
- *Developing new programs to keep students in school
- *Establishing a criteria for determining "competency" of high school graduates
- *Establishing school-based child care for teen mothers
- *Requiring Missouri inmates without a high school diploma to earn a General Equivalency Diploma (GED) before they can be granted parole.

Secretary of State Roy Blunt and the Missouri Commissioner of Elementary and Secondary Education, Dr. Robert Bartman--the Chairman and Vice-Chairman of the Literacy Council--released the Interim Report on April 13, 1989. The 50-member Council makes these initial proposals after a year of study and input from education leaders, business and labor people, literacy providers and Missouri citizens.

The Council held five public hearings around the state in which over 200 people addressed illiteracy problems in Missouri. The Council divided itself into five subcommittees:

- *Literacy Assessment and Evaluation
- *Support and Reinforcement for Literacy Skills
- *Literacy for School-aged Missourians
- *Literacy Enhancement for Missouri Workers
- *Literacy Skills for At-risk Missourians

The committees conducted numerous study sessions. Additionally, a study on the workforce in Missouri was commissioned. Three statewide surveys were administered, and reports from national experts on literacy were utilized in fashioning this report.

The Council's first official act was to establish a public, not-for-profit foundation named Literacy Investment For Tomorrow-Missouri (LIFT-MO). The foundation acts as a catalyst between private business and government. LIFT-MO is not a part of state government and only receives funding from the contributions of private individuals, foundations or other corporate gifts. Chartered in 1988, the foundation will fund research projects on adult education as well as provide ongoing support to literacy programs.

As the report states, American workers face an ever-intensifying need for literacy. Literacy itself is and will continue to be a "receding horizon"; that is, the level of ability adequate 25 years ago or even today will not be adequate tomorrow. Such considerations have led the Council to focus on what is often referred to as "functional literacy" which is defined as the ability to read, write, and comprehend facts on familiar subjects, as well as understand whatever signs, labels, instructions, and directions that are necessary to survive in one's environment. The Council is working to address future problems now--so that Missouri will be able to take a confident step forward into the next century.

The purpose of the Interim Report is to generate additional discussion and public comment as the Council refines the recommended Action Plans before presenting a final version to the Governor later this year. Your participation is encouraged. If you are interested in attending one of the public hearings, submitting written comments or visiting with the Council's staff about the Interim Report, please contact:

Ben Sells, Executive Director
Governor's Advisory Council on Literacy
Secretary of State's Office
P. O. Box 778
Jefferson City, Missouri 65102
(314) 751-2379

A Table of Contents follows this introduction which shows the report being divided into four sections:

- *Literacy in Missouri
- *The Foundations of Literacy,
- *Literacy and Society
- *Re-Valuing Lifelong Education

The recommended action plans are contained within the body of the report with supporting documentation and rationale; however, all of the action plans are restated in the Appendix so readers can quickly and easily get a sense of the Council's recommendations.

Interim Report
of the Governor's Advisory Council on Literacy
April, 1989

Table of Contents

Literacy in Missouri	2
Education and Integration	2
The Definition of Literacy	4
Literacy and Missouri's Workforce	5
Enough Is Known for Action	
--The Structure for the Solution Is Present	8
The Foundations of Literacy	9
Prenatal Care	10
Infancy	11
Three-to-Four-Year-Olds	13
Libraries	13
Community Analysis	15
Literacy and Society	16
At-Risk Missourians	16
Attaining Literacy	17
Dropping Out	19
At-Risk Parents and Children	21
Remediation	23
Family Involvement	24
Television	25
Graduates	25
Re-Valuing Lifelong Education	27
Adult Basic Education	27
Volunteers	30
Job Skills and Business Involvement	32
Learnfare/Welfare-to-Work	34
Education in the Prisons	35
English as a Second Language	36
Restatement of Recommended Action Plans	
	Appendix

LITERACY IN MISSOURI

In the last three years, literacy campaigns have been formed in over 30 states, including Missouri. America's first lady, Barbara Bush, proclaims literacy as her number one concern. The United Nations General Assembly has proclaimed 1990 International Literacy Year. Into this clamor of talk and activity comes the Missouri Advisory Council on Literacy. The Council, comprised of leading Missourians from business/labor, education, libraries, agriculture, government, media and literacy providers, seeks understanding of past and present campaigns in order to recommend the future for Missouri literacy efforts.

The Council recognizes that calls for large-scale literacy campaigns are not unique to the United States or to the present. According to Robert F. Arnove and Harvey J. Graff, major campaigns all over the world can be traced back over 400 years. These campaigns almost always accompanied larger transformations in societies. Massive literacy campaigns have been initiated by charismatic leaders such as Luther, Calvin, Knox, and Gandhi, and tied to notions of salvation, redemption, economic reform, and enlightenment.¹

From the earliest settlements to the present, Americans have carved unique attitudes toward literacy and formal education. The 19th-century American common-school "crusade," which led to our present public school system, tied literacy strongly to the development of democracy. Horace Mann and those who followed argued that all citizens needed the benefits of literacy in order to participate fully in the republic. In the first half of the twentieth century, literacy and formal schooling have continually been tied "to the creation of a new and more just social order."² Thus, literacy has been viewed as more than a set of skills. Rather, the acquisition of literacy has been linked to goals as broad as producing a "more moral society or a more stable political order."³

Education and Integration

The Council recognizes that fundamental changes are in store for Missouri, and new literacy campaigns must focus on these changes, meeting the particular needs of Missourians in the 21st century. Schooling for these changes will need to continue to educate "future citizens," as well as integrate individuals into a changing economic system. These demands suggest that education in all its forms must be rejuvenated in this state. What is now tired and beaten must be infused with energy and conviction to meet the literacy needs of the new century. As long ago as 1918, the National Education Association argued that "education in a democracy. . . should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends."⁴

Today, the concerns about literacy have focused on citizens' integration into the political system, and in the twentieth century, on integration into the economic system. But whatever the reason, literacy must be promoted in the entire range of educational opportunities. Efforts to educate present workers must be tied back to programs for improving the literacy of young people. Though economics is only one aspect of the literacy problem, it is an integral aspect. Current changes in jobs and the available workforce mean fewer low-skill jobs and fewer high-skill workers. The success of literacy efforts is also tied to economics. Much of what needs to be done to increase literacy cannot be accomplished because of lack of funds.

The Council held five open meetings across Missouri, in Cape Girardeau, Kirksville, Joplin, St. Louis, and Kansas City, and heard from over 200 representatives from school districts, businesses, libraries, volunteer organizations, Adult Basic Education, and colleges. In addition, valuable testimony was given by students already participating in Missouri's literacy programs. Through its open meetings and research, the Committee has learned about the status of Missouri as it approaches the next century. Our goal is to pass on this information, to inform the educators, learners, employers, workers, policymakers, and voters of Missouri in order to create an atmosphere for change. To ensure success, Missouri must see the need for change, we must have a positive attitude about literacy, and we must support our attitudes with action.

Any review of past literacy campaigns, whether in or out of public schools, reveals that literacy serves to empower the learner, "especially when it works in conjunction with other changes."⁵ Ultimately, most observers of literacy campaigns suggest that opportunities for exercising literacy determine how prized this new knowledge will be. Recent cries for new literacy efforts grow out of the realization that the next century will demand ever increasing abilities to communicate and also out of the realization that each citizen pays the price for adult illiteracy in this country.

Jeanne S. Chall, Elizabeth Heron, and Ann Hilferty suggest that even a cursory look at U.S. history clearly "indicates that adult illiteracy has been with us for a long, long time."⁶ These historians pinpoint the first major American illiteracy campaign as occurring during the Great Depression. The second national campaign can be traced to the Right-to-Read Effort of 1969 when federal funds were allocated to eradicate adult illiteracy. They argue that now a new campaign is needed, a campaign that will tie adult literacy programs to programs for improving the literacy of young people.

Several lessons have been learned from reviews of previous campaigns:

CAMPAIGNS NEED TO RUN LONG ENOUGH TO ACCOMPLISH GOALS.

CAMPAIGNS NEED TO COMBINE LOCAL INITIATIVES WITH LARGER (STATE AND NATIONAL) PROGRAMS.

CAMPAIGNS NEED TO TAKE INTO ACCOUNT THAT MANY OF THOSE MOST IN NEED WILL RESIST PROGRAMS THAT SEEM TO BE IMPOSED ON THEM.

ANY LITERACY CAMPAIGN MUST EVENTUALLY LOOK STRONGLY AT SCHOOL AGE LEARNING IN ORDER TO STOP FUTURE ILLITERACY.

LITERACY PROGRAMS MUST VIEW LITERACY IN THE CONTEXT IN WHICH IT OCCURS.⁷

CAMPAIGNS NEED TO BE INTERGENERATIONAL IN NATURE.

The Definition of Literacy

American workers face an ever-intensifying need for literacy. Literacy itself is and will continue to be a "receding horizon"; that is, the level of ability adequate twenty-five years ago or even today will not be adequate tomorrow. Such considerations have led the Council to focus on what is often referred to as "functional literacy." The Council thinks of functional literacy as the ability to read, write, and comprehend facts on familiar subjects and to understand whatever signs, labels, instructions, directions, etc., are necessary to survive in one's environment. The eighth grade is targeted as the most basic entry-level functional limit.

Added to this definition are the demands of an individual's job, particular day-to-day activities, and personal goals, which often require a higher level of skills. Dr. Richard Robinson and Dr. Judy Wedman of The University of Missouri suggest workplace literacy can be seen as basic literacy skills, job related literacy skills, and self-awareness skills. Basic literacy skills include the ability to "use communication, computation, and problem-solving skills to minimum performance levels." This includes (among other traits) the ability to use a variety of print materials, to write and record information, to speak coherently, to understand and apply basic math concepts, to follow complex written directions, and to "deal with problems or situations that present multiple variables." Job related literacy skills involve the "communication, computation, and problem-solving skills" identified with specific jobs. Self-awareness literacy involves the ability to develop realistic career goals, to assess abilities, and to make appropriate decisions. Literacy of the printed and spoken word is also affected by and interconnected with literacy in relation to society, culture, politics, and other areas where specific knowledge and skills are necessary for interdependence.

Literacy and Missouri's Workforce

Missouri's greatest resource lies not in its mines, its factories, its acres of farmland, but in its people. The Advisory Council on Literacy places this human resource as the starting place for all change--whether in the home, the school, or the workplace. Simply monitoring the number of workers does not adequately predict the economic future of Missouri's workforce. As entry-level jobs become increasingly more sophisticated, the basic skills needed to enter the workforce increase. In Workforce 2000: Work and Workers for the 21st Century, William B. Johnston reports, "Between now and the year 2000, for the first time in history, a majority of all new jobs will require post-secondary education."8 According to Workforce 2000, by 1990, three-quarters of all jobs will require some post-secondary education, and by the year 2000, 24% will require four or more years of college (currently, 20% of jobs require this). Also, jobs requiring the lowest skill levels (basic/minimal reading, writing, and math) will drop from 9% of the total job pool to only 4%, while jobs requiring the highest skill levels (reading, writing, math, and analytical ability) will grow from the current 24% of jobs to 41% by 2000.

The quality as well as the quantity of potential workers is of major importance to employers. When skills obtained in formal education or in job training programs do not match the skills required in the workplace, both the employee and the employer lose. To negate these losses and to keep Missouri workers competitive, Missourians must acquire much more than basic skills. Cooperation in teaching these skills must come from all areas of society--including the workplace.

Missouri Opportunity 2000: The State of the Future has provided the impetus behind the Governor's Advisory Council on Literacy by suggesting that the work done by the state's workforce will change substantially as we approach the next century and then change repeatedly in the years after that. To remain competitive, workers clearly must have the skills to meet new challenges. The Council is working to address future problems now--so that Missouri will be able to take a confident step forward into the next century.

Both employer and employee needs should support literacy programs that will address future problems. The Bottom Line suggests that "as a consequence of smaller growth in the labor force and a diminishing pool of qualified workers, employers may face serious skill shortages not experienced since W.W. II."9 Because of this shortage, employers will almost surely have to recruit from "traditionally less skilled groups and underutilized population groups."10 This means increasing numbers of women, minorities, and immigrants will have to be recruited and trained to fit future needs.

Current employees also will have to adjust to changes in the workforce. Long able to enter the workplace with marginal skills, employees in the future will "face a job market that requires increasingly flexible skills, with many workers changing jobs five or six times during their worklives."¹¹ The worker, then, will apply for jobs demanding ever-increasing thinking and reasoning skills.

To make recommendations for the future, the Council commissioned the Missouri Occupational Information Coordination Committee to write a report categorizing the literacy levels of Missouri's current workforce and determining the levels of literacy required by the workforce of the near future. This step was accomplished by combining information from several existing data bases. The methodology involved in this rather extensive project is available, but to simplify results this report will in most cases simply summarize the results of this computer analysis.

There are three major divisions of characteristics used in this project, all of which are included in the overall concept of workplace literacy:

1. Reasoning, Math, and Language development--education acquired from both formal and informal sources. These three factors combined make up General Education Development (GED):
2. General, Verbal, and Numerical aptitude--capacities or specific abilities needed by workers to learn a given activity.
3. Specific Vocational Preparation (SVP)--the amount of time required to prepare for a particular job.

The fact-finding project, in order to measure present growth and then compare it to future growth, focused on figures for 1984 employment, estimates of 1995 employment, average annual openings due to growth, average annual openings due to replacement needs, and total average annual openings. These criteria are essential in assessing total future needs--for they measure both job openings created by growth and replacement needs for the near future.

The Council's project assumed first (like Workforce 2000) that "for each occupation, the new jobs created will require the same levels of education required for that occupation today."¹² This means that noticeable changes will be caused by increases or decreases in actual numbers of jobs in specific skill levels, rather than from changing demands of particular jobs. When Missouri's occupations are examined closely (combining reasoning, math, and language demands), small but significant differences between current and future needs become evident.

In general, occupational trends follow the direction of occupations since World War II. Movement toward a more complex, service-oriented economy results in decreases in the percentage of unskilled jobs, increases in the percentage of "second level" jobs, and increases in the percentage of jobs near the "top end" of the job spectrum. (see Table 1--One tenth of one percent represents about 2,500 jobs in 1995).

The Missouri Division of Employment Security has tests for both reading and nonreading individuals designed to measure GED levels and aptitude levels. The Missouri Occupational Information Coordinating Committee operates an automated system in Missouri which relates the results of these tests to occupations. Linking these two sources provides both the skill levels needed by Missouri's future workforce and the skill levels of Missouri citizens.

A comparison of Missouri's occupations to the nation's occupations shows that there is almost no difference in the percentage distribution of GED skill level requirements (see Figure 1). In both Missouri and the nation, only 17% of future jobs will require a skill level of 2 or less. The remaining 83% of the jobs will require skill levels higher than 2. In other words, there will be few jobs for persons with low skills.

Skill level 2 is characterized in the reading and writing areas by such qualities as having a passive vocabulary of 5,000 to 6,000 words, reading adventure stories and comic books, and writing compound and complex sentences with adjectives, adverbs, and proper end punctuation. An evaluation system (developed by the Department of Elementary and Secondary Education) was undertaken several years ago to equate the GED levels with school curriculum. Their results place skill level 2 as approximately equivalent to grades 4-6. Unfortunately, not all students who have passed a particular grade level will have mastered the appropriate skill levels.

A separation of the three GED skills shows the following results: Seventy-five percent of Missouri's future jobs will require language skills above Level 2; nearly 92% will require reasoning skills above Level 2; and 67% will require math skills above Level 2.

Isolating new jobs created by growth in Missouri offers another important perspective. This view shows that only 13% of the new jobs in Missouri have a skill rating of 2 or less for reasoning, math, and language combined.

On the average, the jobs that are losing employment in Missouri are the jobs demanding lower skill levels for each of the occupational characteristics (see Table 2). A comparison of 1984 employment and growth openings also shows an increase in jobs requiring a high level of verbal aptitude (see Figure 2). Only 26% of the jobs in 1984 required high verbal aptitude, while 33%

TABLE 1

PERCENT DISTRIBUTION OF
GENERAL EDUCATIONAL DEVELOPMENT NEEDED FOR MISSOURI OCCUPATIONS^{a/}

<u>Skill Level</u>	<u>1984 Employment</u>	<u>1995 Employment</u>	<u>Annual Growth Openings</u>	<u>Annual Replacement Openings</u>	<u>Average Annual Openings</u>
0.0 to 1.4 (simple)	4.6	4.4	1.9	3.1	2.9
1.5 to 2.4	26.0	26.5	32.2	26.8	27.6
2.5 to 3.4	30.7	30.3	26.2	33.8	32.6
3.5 to 4.4	26.7	26.3	21.2	23.7	23.3
4.5 to 5.4	11.3	11.8	17.7	12.1	13.0
5.5 to 6.0 (complex)	<u>0.7</u>	<u>0.7</u>	<u>0.8</u>	<u>0.5</u>	<u>0.6</u>
TOTAL %	100.0	100.0	100.0	100.0	100.0

TABLE 2

Declining Occupations Have Lower Skill Levels

	<u>Current Jobs</u>	<u>Fast Growing Jobs</u>	<u>Slow Growing Jobs</u>	<u>Declining Jobs</u>
Reasoning ¹	3.6	3.6	3.7	3.3
Math ¹	2.7	2.7	2.6	2.4
Language ¹	3.1	3.0	3.2	2.7
SVP ²	5.1	5.1	5.2	4.7
General Aptitude ³	2.8	2.8	2.8	3.1
Verbal Aptitude ³	3.0	3.0	2.8	3.2
Numerical Aptitude ³	3.3	3.2	3.3	3.5

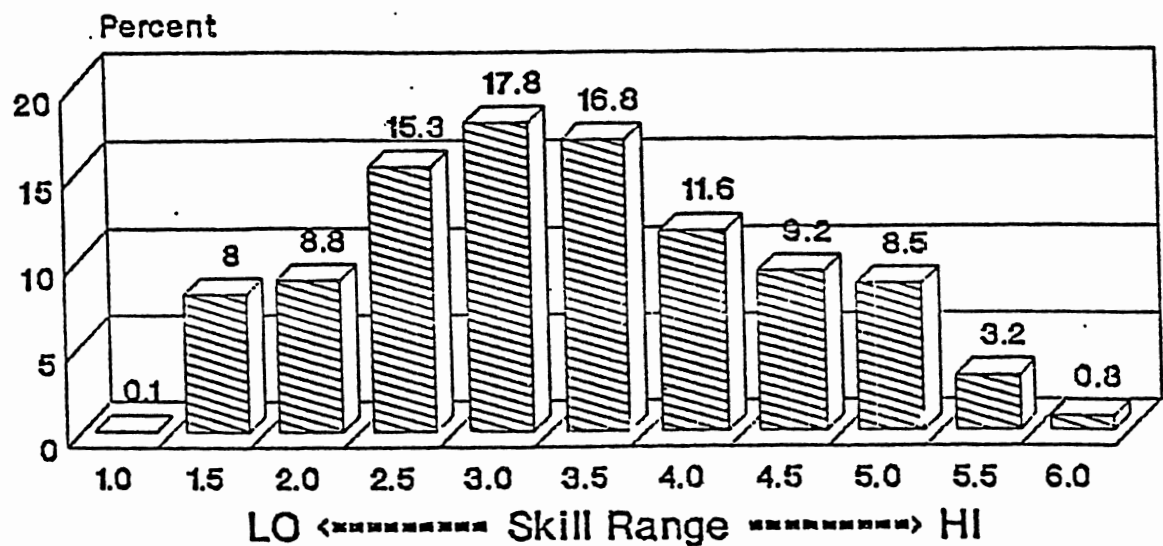
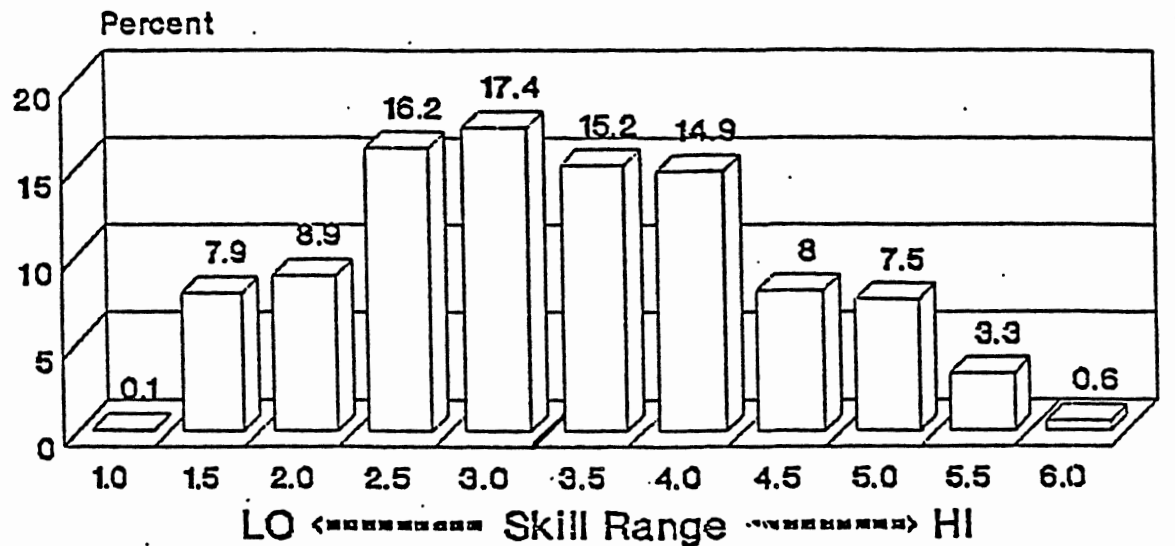
^{1/} Scale 1 (low) - 6 (high)

^{2/} Scale 1 (low) - 9 (high)

^{3/} Scale 5 (low) - 1 (high)

FIGURE 1

Future Workforce Skill Requirements



Combined GED Levels

Missouri Jobs National Jobs

DATA SOURCE: MOICC

FIGURE 2

VERBAL APTITUDE COMPARISON
FOR MISSOURI'S NEW AND EXISTING JOBS

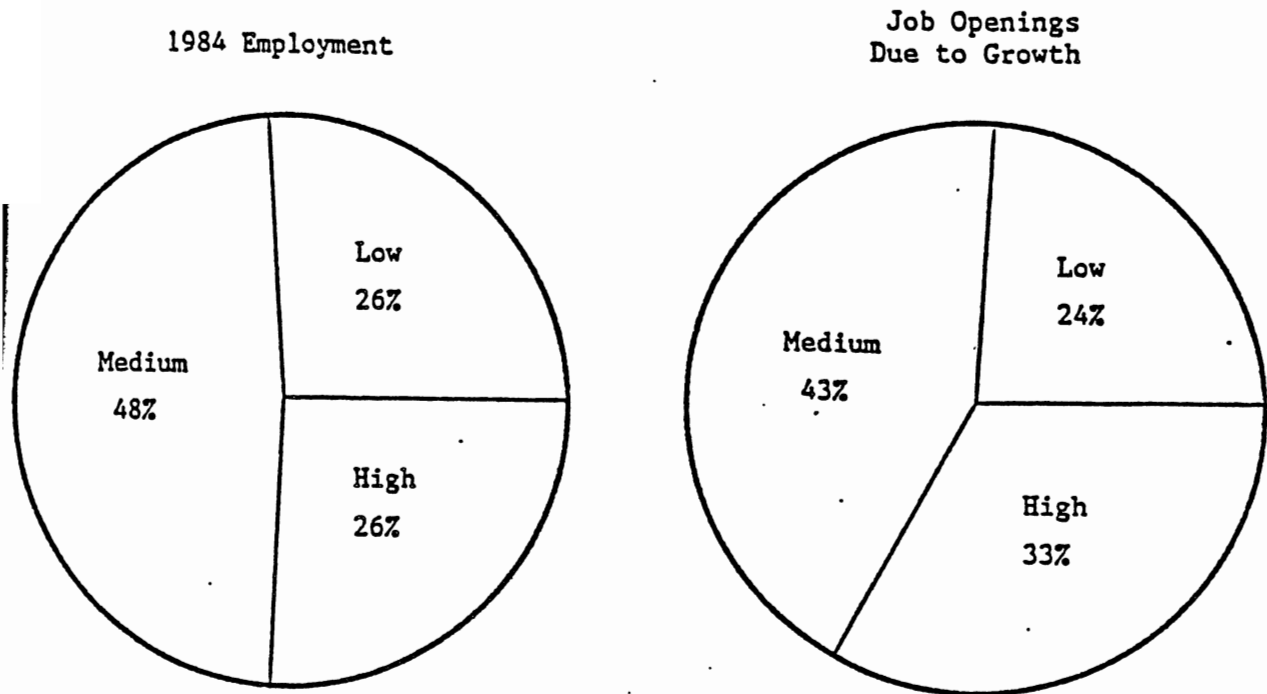
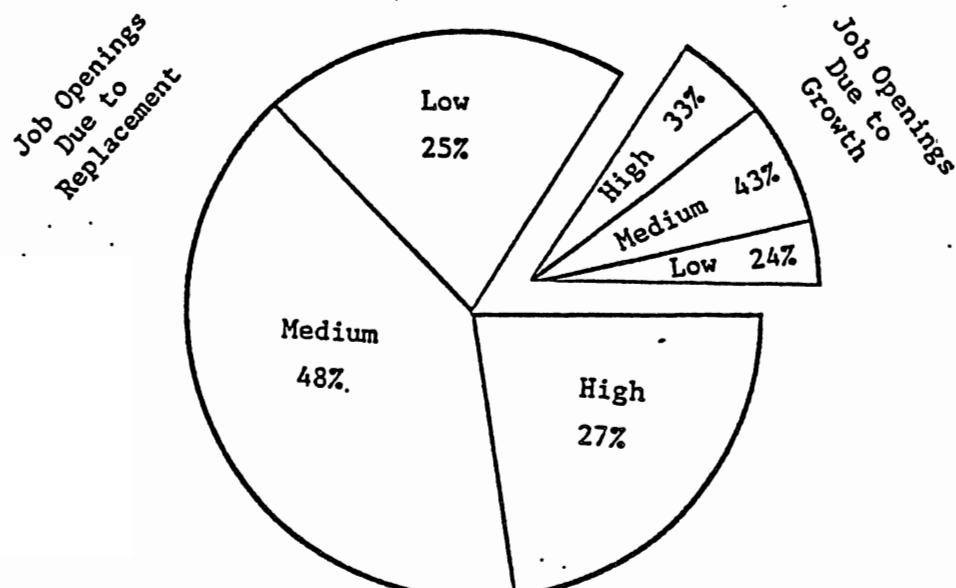


FIGURE 3

VERBAL APTITUDES NEEDED
FOR MISSOURI'S FUTURE JOB OPENINGS



of the new jobs are expected to require this level. Verbal aptitude will be in high demand in growing "top scale" jobs, while those jobs demanding little verbal aptitude will continue to decline. But job openings created by growth only represent about 16% of total openings (see Figure 3). The remaining openings (84%) are created by persons leaving the labor market (not including turnover). Of these openings, 27% are in the high level of verbal aptitude, 48% in the medium, and 25% in the low.

Enough Is Known for Action

--The Structure for the Solution is Present

Certainly the numbers can paint an ominous picture. And the effects of illiteracy cost individuals and society much more than money--though the causes and solutions are often tied to economics. It will do us little good to panic or throw our hands up in defeat or condemn all past practices. Concern for the education of U.S. citizens has always been a part of our history. In the title of his book on solving America's dropout problem, Andrew Hahn states, "Enough is known for action."¹ The Council takes this stance in dealing with the entire area of literacy.

The Council also believes that the general structure for the solution is present. Programs already in place can meet our needs with the correct support, modification, and cooperation. Existing programs need more money to do their jobs effectively; new information and research need to be utilized; those providing services need to communicate and cooperate.

The Council believes that communication and cooperation are very important to success in Missouri. Too often, turf battles cause unnecessary overlapping and wasted money; and services that could be integrated are kept apart, often separating the task from the goal. Programs involved in improving the lives of Missourians need to share information, refer clients to other appropriate services, and pool their resources when possible. One solution to this problem has already been implemented in the Council's most significant accomplishment to date, organization of Literacy Investment for Tomorrow--Missouri (LIFT--MO). This foundation acts as a catalyst between private business and government and as a clearinghouse for statewide dissemination of literacy information and materials.

Because illiteracy is only one of a number of problems faced by many Missourians, those concerned with solving these problems must foster cooperation among themselves, and the State of Missouri must develop the networks and information needed for that cooperation.

THE FOUNDATIONS OF LITERACY

Literacy is not an isolated product of the formal educational system. Health, family life, and social attitudes, especially during the formative years of early childhood, profoundly affect language acquisition. Furthermore, the roots of illiteracy and academic failure can be traced as far back as prenatal care. Consequently, the Council attempted to discern (a) what factors outside of formal school had hampered the progress of the estimated 400,000 adults in Missouri who lack the basic skills to read, write, compute, and otherwise function in society and (b) what solutions are in progress and what solutions are needed.

The Council learned the importance of looking at the preschool child as a whole. Compartmentalizing a child's life according to health, family life, education, nutrition, and day care prevents us from seeing the inextricable ties between these dimensions. Seeing the child as a whole also means, in practical terms, that the various government and nonprofit agencies concerned with families and children must coordinate and build coalitions to take advantage of limited resources. We wholeheartedly agree with Lisbeth Schorr, in Within Our Reach: Breaking the Cycle of Disadvantage, that "[I]n the period between the womb and the school, one cannot care for children without educating them, and one cannot educate them without caring for them."²

That illiteracy is intergenerational is well documented. Our conversations with former literacy students and educators working with teen mothers painfully brought to life the possibility that Missouri and the nation are confronting a permanent underclass of illiterates, with illiteracy recurring from parent to child. The alarming phenomenon of children having children vividly demonstrates the vicious cycle of illiteracy and academic failure.

We also learned, however, that within the intergenerational nature of literacy lies the possible key to breaking the cycle. Literacy educators across the nation suggest adult students often learn because they want to read to their children. This was a recurring motif in the public hearings conducted by the Council in Missouri and in conversations with Adult Basic Education students. One mother explained she was compelled to overcome the shame and humiliation of confessing her inability to read by the desire to assist her learning-disabled child.

The Council found that parental involvement is the key to the success of preschool programs. Programs such as Parents as Teachers and Head Start not only perform the valuable service of early detection of problem learners but also help identify parents in need of literacy tutoring. Unfortunately, even when such parents are motivated to seek assistance, they frequently confront barriers such as lack of transportation and inadequate child care. Perhaps the greatest barrier is the stigma attached to being illiterate or a high school dropout.

Finally, the Council learned that the battle to fight illiteracy on all fronts requires the collaboration of a wide spectrum of organizations and institutions at both the state and local level: social-service agencies, libraries, colleges and universities, businesses, and civic and volunteer organizations.

Prenatal Care

A child's educational prospects may be determined before birth by the quality of prenatal care. Mothers who do not receive adequate care are about three times as likely to have low-birth-weight or premature babies. Centers that follow the progress of low-weight babies report rates of learning disability as high as 40-45% as well as poor language development, reading problems, difficulty with abstract concepts, poor impulse control and attention deficit disorder. In 1987, 7% of Missouri babies were classified as low weight.

Teenage mothers constitute an at-risk group likely to give birth to low-weight or premature infants. A typical portrait is a young girl with a history of academic failure and low self-esteem who believes she will find love and purpose through motherhood. In reality, she is unlikely to receive adequate prenatal care, and her baby will most likely grow up in a chaotic home life that is not conducive to learning. Such is the vicious cycle of illiteracy that starts before birth.

We conclude that the battle to fight illiteracy must start at the beginning to ensure that babies are not handicapped by preventable health problems stemming from inadequate prenatal care. Early preventive measures are more cost-efficient than dealing with problems at a later stage. One expert notes that prenatal care for a pregnant teenager costs as little as \$600 per client, whereas intensive care for a premature infant can easily cost \$1,000 per day.

Action Plan 1: The Department of Health in cooperation with the Departments of Elementary and Secondary Education, Mental Health, and Social Services should expand the pilot project "First Steps" so that it continues to grow in Missouri.

This program provides all-around support to at-risk families with low-birth-weight babies until the child is three years old. Recognizing that many factors affect development, the program helps parents with housing, health care, parenting skills, and education. Currently, the state has only four such programs.

Action Plan 2: The "Caring Community," a coalition of the State Departments of Health, Education, Social Services, and Mental Health, should coordinate efforts to improve prenatal care especially among teen mothers.

Better coordination between hospitals and social service agencies will help identify hard-to-reach families in need of counseling and education. For example, Parents as Teachers coordinators often target hospitals in their recruitment. Hospitals can encourage literacy by promoting programs such as California's "Rock and Read" which encourages reading to children and supplies books to parents. In general, we hope that hospitals continue the trend of providing prenatal care and parenting skills programs and also refer at-risk families to the appropriate agencies.

Infancy

A recent Chicago city schools' assessment found that approximately one-half of the children entering kindergarten did not know their own name. This frightening statistic confirms what we now know about early childhood development:

Although the ultimate causes of educational failure may vary significantly from child to child, most educators believe potential dropouts can be clearly identified by third grade. Behavior patterns leading to school failure and dropping out begin to appear during infancy and the toddler years. Without early intervention, such children have difficulty taking advantage of the learning opportunities available in elementary and secondary school. It is, therefore, likely that many otherwise bright children will have their talents lost to themselves and society.³

Yet in 1986, the nation spent \$264 billion on education for children age six and older, while it spent only \$1 billion for children five years and younger. Clearly, we must turn our energies and resources to preschool education if we are to combat forces that breed illiteracy. As with prenatal care, it is far more cost-efficient to expand preschool educational opportunities than to pay the price of remedial education and welfare.

Missouri is very fortunate to have one of the premiere pre-school programs, Parents as Teachers (PAT), coordinated by the Department of Elementary and Secondary Education. In order to promote an adequate family environment, PAT aids parents in preparing for children, gives information on child growth and development, offers guidance in basic-skills development, checks the child periodically to detect educational or sensory handicaps, offers the opportunity to meet with trained parent educators and

other parents in the program, and sets up resource centers. Independent studies show that children of participating families--regardless of socio-economic background--are significantly more advanced in language development, problem solving, and social development.

PAT does not remove children from the home for schooling; instead, parent educators give parents research-based, practical information on the development of their children. Participation by parents is voluntary, and help is available to parents of children from birth to five years old, as well as to expectant parents. We affirm PAT's open eligibility requirements, noting the importance of programs that do not carry the stigma of being only for low-income families.

PAT also promotes literacy by teaching parents the value of education and by identifying adults with low basic skills or learning disabilities. When confronted with parents who are unable to read, PAT coordinators often provide audiotapes of children's literary classics so parents can still "read" to their children. We affirm this positive approach as an excellent way to motivate adults who need an incentive to seek assistance in basic skills.

The number of families served by PAT grew from 17,725 in 1985-86 to 53,175 in 1987-88, and the funds allocated grew from \$2,658,750 to \$7,976,200 in the same period. For the 1988-89 school year, PAT received \$11.4 million from the state government. For each participating family, school districts are given \$150. Current funding provides full services for approximately 30% of Missourians with children up to four years old and partial services for 50% of Missourians with three- and four-year-olds.

PAT should be expanded to all who can benefit from it, and those reluctant to take advantage of the program whether from fear, shame, or simple indifference, should be encouraged to participate.

Action Plan 3: By 1992, the State Legislature should provide the funding necessary to make the PAT program available to all eligible at-risk families.

Additional funding will be necessary for enhanced recruitment of hard-to-reach families, for programs targeting school districts where dropout rates are highest, and for a major public information campaign.

PAT, as a relatively new program, needs the Missouri School Boards Association to educate local school boards about the merits of the program. Moreover, PAT coordinators report they must often overcome the suspicion of families who fear government interference into their private home lives.

Increased funding will help facilitate coordination between PAT, hospitals, and agencies concerned with social services and health to help recruit hard-to-reach and at-risk families, especially teenagers.

A number of practices have proved successful for engaging reluctant families in beneficial programs such as PAT. Support for these practices by the Department of Elementary and Secondary Education (DESE), school districts, and other agencies would help to reach those unaware of current services. DESE should select the two or three most successful practices in the PAT program and implement them throughout the state.

Three-to-Four-Year-Olds

The Head Start program, providing both center and home-based education and care for disadvantaged 3- and 4-year-olds, is a demonstrated success in both Missouri and across the nation. As with Parents as Teachers, its strengths lie in its focus on the whole child in terms of health, nutrition, and social development, and its involvement of parents who serve on policy councils and committees and have a voice in the administration of the program. Many parents serve as volunteers and as paid staff. Head Start coordinators echoed the experiences of the PAT staff in their frequent identification of adults with low rates of literacy and referrals to appropriate resources.

However, Head Start is currently serving only 15-20% of eligible families in Missouri. Moreover, there is concern about the large number of families whose incomes exceed the poverty line but are still in need of support services. The isolated communities of rural Missouri are not being adequately served by Head Start primarily because of inaccessibility. Other obstacles include child care: many working parents cannot locate affordable child care for the hours after Head Start closes.

Solutions for this problem include additional federal funding for Head Start to better serve the rural areas through more home-based and mobile programs, and for expanded hours at centers to make programs more accessible to working parents.

Action Plan 4: Missouri's congressional delegation and lobbyists should work toward full implementation of Head Start to serve all eligible families by 1995.

Libraries

The public library is an important educational and cultural resource in our communities. The Council applauds the efforts of those libraries which are promoting reading and providing outstanding activities for parents and preschool children. Libraries have also served as sites for literacy tutoring and Adult Basic Education classes and are the source for materials used in these programs.

Libraries contribute to learning from birth to adulthood by providing services, programs, and materials to inform parents of the complexities of raising children; by providing read-aloud books, educational toys, and in-library activities; by providing materials for activities outside the library (i.e., day care); by providing, where they are essential, multi-language collections for parents and preschoolers; and by providing materials and programs to aid in literacy education, including technology and culture.

In Realities: Educational Reform in a Learning Society,¹ the American Library Association's response to A Nation at Risk: The Imperative for Educational Reform, the library community describes its role in lifelong learning, specifically addressing the issue of illiteracy. The Council concurs with Realities in the following recommendations:

Action Plan 5: The State Board of Education should establish more specific state standards for school libraries, and state agencies which have responsibilities for pre-school child care services should encourage the use of book and library resources as part of the basic program requirements.

In addition, school superintendents, boards, parents, and teachers in every community should prepare plans for developing school library resources, for using these resources effectively, and for coordinating services with public libraries in the community.

The Council applauds efforts to bring library users, librarians, and public officials together. A Governor's Conference bringing these policy makers together would help assess the capacity of our libraries. Another way of bringing officials together would be to include a position for a library specialist on the State Board of Education.

Action Plan 6: Libraries should coordinate efforts with local literacy training and/or ABE programs to provide better recruitment, alternate sites, and reading materials and should allocate a percentage of their money for literacy materials and services.

Action Plan 7: The State Legislature should increase funding for libraries to provide library service for geographic areas not currently served and to support the staffing needed to conduct activities in all libraries for preschool children and to assist adult literacy programs.

Libraries, with adequate funding, can provide services beyond their own walls to include hospitals, nursing homes, correctional facilities, and other institutions.

Community Analysis

The Council recognizes that each local community in Missouri has a unique set of problems and resources and, therefore, must analyze and address its own situation. Agencies and institutions concerned with literacy and education should collaborate on the development of guidelines to assist local communities with self assessment. The guidelines might direct communities on how to evaluate statistics on at-risk families, opportunities for preschool education and adult literacy training, and involvement of local businesses and community organizations.

LITERACY AND SOCIETY

Families, neighborhoods, and communities play a vital role in the education process. Speaking at Missouri Youth 2000 (St. Louis, Missouri, November, 1988), Dr. Thomas Sticht stated that money spent on new parents and young adults (future parents) performs a "double duty"--helping the parents as well as their children. Sticht stressed research showing that education is a social function, dependent on family, neighborhood, and community involvement. According to Sticht, human potential is not determined by biological makeup, it lies in social interaction. Without support outside the school doors, education is difficult if not impossible. When preschool programs such as Head Start do not show long-term benefits, it is because of a lack of social support and the inability of the schools to offset this deficiency with continuing effective programs.² Gordon Berlin and Andrew Sum, in Toward a More Perfect Union: Basic Skills, Poor Families, and Our Economic Future add evidence to the need for the valuing of education outside of school:

When school is in session, advantaged and disadvantaged children learn at about the same rate. But during the summer months when schools are closed, home and peer influences reassert themselves. At the end of the summer, advantaged children actually score higher on a standardized test than they did when the summer started while disadvantaged children fall further behind.³

At-Risk Missourians

For many Missourians, the years before formal schooling are years of preparation with parental support. Formal schooling then prepares them for lifelong learning and future success. From this point they can in turn contribute to the preparation of the next generation. The William T. Grant Foundation Commission on Work, Family and Citizenship (The Forgotten Half: Non-College Youth in America) writes about the "interdependence," not total independence or dependence, that is a sign of effective participation in a community. Interdependence means both receiving and giving support.⁴

But for other Missourians, this cycle is broken. Though completion of this cycle is not a recipe for success, nor non-completion a recipe for failure, those who miss out on the benefits of this preparation are "at-risk." At-risk Missourians are caught in a cycle where the results of problems become the causes for more.

The largest aspect of public involvement in this preparation is public schooling. But increasingly the public school is being asked to do more and more. As jobs become more complex, more service oriented, society becomes less able to accommodate an unskilled workforce. Young and uneducated potential workers cannot step easily into the new jobs; therefore, we have called on the public schools to fill these economic and social gaps--by

training our youth for future jobs and by occupying their time until they are prepared for entrance into the workforce. The deterioration of the family structure also adds to the responsibility of socialization for the public schools.

Although no segment of society has a greater opportunity to acquire literacy skills than elementary and secondary school students, an alarming percentage drop out and forego the opportunity to acquire the skills necessary to function as interdependent, productive, and informed members of society. Although a majority do graduate, many graduates do not have the basic skills which the granting of a high school diploma implies.

Even for those students attending school, a fulltime commitment to formal education is not always a priority. By their senior year, 63% of all seniors are employed part time, 42% of sophomores.⁵ Working up to fourteen hours per week has little effect on dropping out, but fifteen to twenty-one hours per week raises the dropout rate by 50%. More than twenty-one hours of work per week raises the risk by 100%.⁶ Also, under current attendance policies, the average American student is absent nearly twenty days per year.⁷

When the public schools cannot adequately fill the gaps between dependence and interdependence, they fail the expectations of students, parents, and the public. And when students drop out and parents and the public lose interest, they fail the expectations of the schools.

The following findings of the Council are based on many sources including three surveys designed and administered by the Council (one to essentially all public and private elementary and secondary school administrators in Missouri, one to a substantial number of teachers, and one to members of the Associated Industries of Missouri), and presentations to the Council by professionals principally from the Missouri Department of Elementary and Secondary Education.

Attaining Literacy

The majority of Missourians learn how to read and write early on in life, and their communication skills continue to develop as they grow older. But this does not happen for all Missourians. Even for those who complete high school, literacy levels acceptable to many employers are not guaranteed. "Credential inflation" is one reason for the present and projected school-to-work problems. During the years when the baby boomers became eligible for the job market, the growth in available workers allowed employers to be more discriminating. Thus they could upgrade qualifications and value attainment (grade completed) over achievement (test scores). Now, credential inflation cannot cope with the smaller workforce.⁸

Though today a higher number of high schoolers go on to college, this leaves fewer high school graduates with good skills to enter the workforce. Recent efforts to improve the quality of graduates have focused almost exclusively on the college-bound, guided by the incorrect belief that a certain percentage of our young are predestined to failure.⁹ This adds to the growing split between the upper and lower classes.

Special efforts must be made to improve education for students at the bottom of the academic scale as well as at the top. While the best students are getting better, at-risk and disadvantaged students are failing. Not all students learn alike, and educators need to be willing to accommodate different learning styles. Currently, most schools teach reading and writing skills using basal reader programs. Basal reader programs use a prescribed series of books, often in conjunction with workbooks, worksheets, flash cards, and tests. Most basal reading series reflect an approach to learning based on discreet skills, which is counter to much of the current research and theory which favors learning from reading meaningful works in their entirety.

While the basal reader/discreet-skills approach works for some, it does not work for all. Requiring such materials and methods limits the teacher's ability to adapt to individual students' learning styles. The National Council of Teachers of English (NCTE) Commission on Reading has issued a statement opposing basal reading systems. NCTE reports:

Literacy levels of American youth would rise if students, from first grade on, were allowed to spend plenty of time reading good books. But to make such reading possible, the dominance of basal reading systems in American classrooms must be broken.¹⁰

Educators need to be involved in an atmosphere of healthy debate, with the outcome being a balance of sound educational practices. This can only occur when all educators are open to ideas, both old and new, and they are allowed to pursue alternatives. The Council agrees with NCTE on the following recommendation:

Action Plan 8: School districts should allow alternatives to basal readers and provide in-service programs that will enable teachers to determine materials and means that best foster the development of literacy.

Dropping Out

There is a lack of consensus on how to define a dropout and, consequently, on how to measure the number of dropouts. But even though statistics from different states and school districts within a state are not necessarily comparable, the most frequently quoted dropout rate for the nation is 25%. Data from Missouri is substantially the same although the rates vary significantly from county to county. Annual dropout rates from each county range from a low of 4.1% (1983-84 9th grade) to a high of 8.9% (1978-79 11th grade). The rates are essentially additive; therefore, for the class of 1982, the percentages for four years of high school equal a 23.5% dropout rate. Even with inconsistencies in statistics, the evidence is overwhelming that the dropout rate is too high and poses a serious problem for Missouri. Attention and resources need to be focused on school districts, and schools with the greatest dropout rates and the programs seeking to alleviate the problem need to be evaluated. In order to do this, and to compare Missouri figures to national data, a uniform and accurate system of calculating the dropout rate must be used in all schools and school districts in Missouri.

Action Plan 9: The Department of Elementary and Secondary Education should mandate in Missouri's schools the dropout definition which states that dropouts are "persons neither enrolled in school or high school graduates." When a student disenrolls and does not request records within the first 20 days of the following quarter, the school should consider the student a dropout. Also, schools and school districts should collect data on dropout rates from the freshman year through graduation.

The above definition of a dropout has been adopted by the Current Population Survey (CPS) and is used by the U.S. Government Accounting Office.

School completion rates are lowest in inner-city areas, where there is a high concentration of minorities and poverty-level families. Though being a minority and being poor often go hand in hand, it is poverty, not race, that is the most common factor in dropping out. A 1977 comparison of 14- to 17-year-olds from families with incomes less than \$10,000 showed that rates of non-enrollment were nearly twice as high for whites as they were for blacks.¹¹

Poverty, which is contributed to by poor basic skills, contributes in turn to the occurrence of single-parent families. A mother or expectant mother without a job is less likely to marry a man who can support her, and men are less likely to marry when they do not earn enough money. Of the children in single-parent households, two-thirds will spend almost that entire child-

hood in poverty.¹² And when those in poverty areas (i.e., the inner city) do rise above the poverty level, they tend to move away from those areas, leaving the community without models of success, suitable spouses, and economic improvement.

Much has been written on the symptoms and causes of dropping out of school, and surveys and questionnaires have been administered to many concerned audiences. But because the varied structures of past surveys and questionnaires lead to incomparable responses, it is impossible to list causes in order of priority with any certainty. One questionnaire lists "marriage" and "pregnancy" as different reasons for dropping out; another combines the two in a single category; and yet another lists "child care problems" as a separate category.

Nonetheless, several categories consistently are perceived by those who study this question as the most frequent causes. These causes can be grouped into school related, economic, and personal. Responses to both the Administrator's Survey and the Teacher's Survey list the three major reasons for student dropout as:

- (1) lack of parental support/low socio-economic background/education not valued
- (2) lack of achievement/lack of academic success
- (3) lack of interest/no initiative

All three of these responses are consistent with poor student performance and student dislike of school, a principle cause for dropping out. Symptoms or warning signs of imminent dropout are listed in the pamphlet, "Who Is Tomorrow's Dropout?: 16 Warning Signs for Educators,"¹³ available from Missouri DESE.

The Council believes that so many solutions and programs have been advanced for solving the dropout problem that primary attention should be directed to selecting and implementing the most effective existing programs. Because there is and will continue to be a finite set of resources to apply to the problem, available resources should be directed to programs addressing the most prevalent causes of dropping out in proportion to the extent of the problem at each school and school district.

Because students drop out for many reasons, an effective dropout program requires a cohesive, integrated effort combining many components, and addressing many problems.

Action Plan 10: The State Legislature should promote innovative means to keep students from leaving school before graduation, such as alternative schools and the proposed raising of the driving age to 18 for those who drop out of school.

Resources indicate that alternative schools which address the strengths of at-risk students and offer them another opportunity to earn a high school diploma can help solve the dropout problem. The Department of Elementary and Secondary Education should help school districts develop alternative programs. The solution for many students who do not succeed in traditional schooling is not more of the same, but an alternative.

The Council also urges those students who do drop out of traditional schooling to pursue a General Equivalency Diploma (GED) through Adult Basic Education.

Action Plan 11: School districts should report the names, mailing addresses, and telephone numbers to local Adult Basic Education centers of students who are 16 years of age or older and who drop out of school for any reason other than to attend another school, college, or university, or enlist in the armed services.

At-Risk Parents and Children

One population that shows a high risk for dropping out are pregnant teenage girls--80% drop out, as compared to 10% for girls who are not pregnant. Teasing from classmates is often a factor in a pregnant teenager's dropping out, especially when the pregnancy occurs outside of marriage.¹⁴ Later, after the baby is born, childcare during school hours is a major concern.

About two-thirds of the babies born to teenage mothers in St. Louis in 1983 were born out of wedlock. In St. Louis City and St. Louis County, between 1973 and 1983, the total number of out-of-wedlock births rose by 27% for nonwhite mothers, while the number for white mothers rose by 75%.¹⁵ According to Ruth Rosauer of the Education Commission of the States, academic success is also involved. Compared to girls performing at or above grade level in school, the pregnancy rate for girls with "poor basic skills" is five times as high.¹⁶

Mothers unaware of correct prenatal care procedures are at risk of producing low-birth-weight babies, which can affect the children's later development. Also, children born to single teenage parents who have not acquired basic skills become at risk of not succeeding in the school system themselves. Most enter school behind their peers who have better at-home opportunities. These examples of the at-risk cycle are documented in "Two Generations At Risk," the 1987 report of the Missouri Governor's Interagency Working Group on Adolescent Pregnancy.

The school system can address both the rising incidence of teen pregnancy and the resulting dropping out. Family planning education--pregnancy prevention programs in the school--and programs to encourage pregnant teens and teen mothers to stay in school could significantly reduce the dropout rate and the cycle of dependency and poverty. The Department of Elementary and Secondary Education should strongly support the development of pregnancy-prevention programs for the middle grades--programs which emphasize the available options other than early parenting or abortion.

The Committee joins the Children's Defense Fund in commending St. Louis's Teen Outreach Program, collaborating with the Junior League, which provides after-school sessions focused on building self-esteem and therefore reducing teenage pregnancies and dropping out. They also place teens as volunteers in community agencies, giving them an active role in their community.¹⁷

Action Plan 12: The Department of Elementary and Secondary Education should promote the development of quality day-care facilities in conjunction with, and preferably within the physical facilities of, the school system to enable young mothers to continue their schooling.

Some causes of dropping out amount simply to students disliking school. This dislike is often caused by poor performance or parents who do not value education. Poor performance leads to retention, "over age," failure, low self-esteem, and difficulty with teachers and administrators, all of which lead to dropping out. Low self-esteem can in turn lead to teenage pregnancy, continued academic failure, and many other problems. Programs that foster improved parental attitudes toward school and improved student performance could lessen many of these problems and reduce the dropout rate.

The fact that children growing up in impoverished conditions often enter school with biological and psychological impairments contributes to the problems listed above and therefore to dropping out. Teen Parents as Teachers (TAMOS) is a branch of PAT directly involved with teenage parents. Like PAT, TAMOS carries out the normal role of educating parents for child raising while also helping young parents continue their growth and education.

The cost of failure is highest for those Missourians directly involved, but eventually everyone pays. The Forgotten Half reports that the losses for the 973,000 dropouts nationwide from the class of 1981 have been estimated at \$228 billion from missed job opportunities. The cost to society will be a loss of \$68.4 billion in taxes. In answer to these projected losses, the Committee for Economic Development states, "Every \$1 spent on early prevention and intervention can save \$4.74 in the costs of remedial education, welfare, and crime further down the road."¹⁸ But these figures

from the Committee for Economic Development came from a program which spent \$6,187 per pupil, nearly twice that spent on Head Start.¹⁹ Clearly, preventing later costs requires adequate spending early on.

Remediation

If children having difficulty with basic skills are detected early, their chances of continuing to graduation are greatly enhanced. Teachers have the greatest exposure to children and, accordingly, the best opportunity to detect problems. They should be trained not only to detect deficiencies in basic skills, but also to spot DESE's 16 warning signs of dropping out.

Action Plan 13: The State Board of Education should include as required teacher education curriculum at all colleges and universities training on how to detect learning disabilities and basic skills deficiencies with attention given to detecting the 16 dropout warning signs.

DESE and/or professional teachers associations such as MSTA, NEA, and AFTA should be encouraged to reinforce the proposed formal training by sponsoring continuing education workshops.

The Council believes DESE should continue to require school districts to implement the Missouri Mastery Achievement Tests (MMAT) to all second graders to detect children at risk because of basic skills deficiencies. But early detection is of no value unless immediate remedial efforts are taken. Only remediation can prevent the cycle of failure and low self-esteem which the Teacher's Survey reported as the major problem of at-risk students. Though Missouri's teachers recognize the need for providing individual instruction, tutoring, and remedial instruction, a majority responded that there are inadequate funds for implementing programs for at-risk students. The importance of remediation is recognized by the Department of Elementary and Secondary Education which currently administers a program of grants for compensatory or remedial education.²⁰

In keeping with this emphasis on remediation, the National Association of State Boards of Education, in Right from the Start: The Report of the NASBE Task Force on Early Childhood Education stresses that early education efforts must (1) not focus solely on "standardized tests, worksheets and workbooks, ability grouping, retention and other practices that focus on academic skills too early and in inappropriate ways,"²¹ (2) must take into account the individual child's development, so as not to "undermine a child's disposition to use these skills over the long term,"²² and (3) must not produce "short-term, trivial results rather than developing long-term intellectual and social capacity."²³

Action Plan 14: The Department of Elementary and Secondary Education should implement its strategy (stated in "Missouri Plan"24) of revising the school classification and accreditation system to require school districts to implement immediate remedial intervention strategies for at-risk students.

Family Involvement

Missouri Commissioner of Education Robert Bartman, in an editorial in The Kansas City Star, writes that "family involvement and support is the key ingredient--the catalyst--needed to make quality education a reality." Because of the changes in the structure of families, he prefers the term "family involvement" over "parental involvement":

Families have changed enormously in the past 20 years. We need to expand the definition of "family" to include step-parents, grandparents, non-custodial parents and foster parents--everyone who is part of the vital support system for children's learning.²⁵

It has been well documented that parental involvement in education increases student performance and probability of success. This is recognized by Missouri school administrators and teachers, as shown in their responses to the surveys. Parents lay the foundation for education; the national PTA reports, "Two-thirds to three-quarters of all usable language is acquired before age 3."²⁶ Parental involvement is important during school as well--from kindergarten to graduation. Teachers need the encouragement, practical help, and student accountability that parents can provide. The role of parents, of the entire family, reaches beyond the boundaries of one household. Parents can make a difference for their community, for all the children and students in Missouri.

The Council encourages community efforts such as those demonstrated by the Parent Teachers Association (PTA) to promote the welfare of all children. Open houses and public meetings can be used to facilitate communication between educators and the general public. Extra efforts must be made to involve those members of the community who are reluctant to respond to traditional invitations.

Although the Parents as Teachers program effectively addresses the importance of parents in early education, and DESE touches on the issue in "The Missouri Plan for Literacy Advancement," more needs to be done for parents of children of school age. DESE and other educational authorities should develop programs for involving parents in their children's education. These programs might include scheduling regular meetings with parents to assess student progress, suggesting ways in which parents might help, notifying parents of truancy, and involving parents in initiatives to improve student attendance.

Parents, and other community members, can help with many of the tasks that make a teacher's day so busy--such as supervising students outside the classroom, tutoring, helping teachers with paperwork, and speaking in classes about their own areas of knowledge. Parents can even operate a homework hotline after school hours.

Parents need to become more demanding of schools, of children, and themselves. Students would benefit if parents carried their strong involvement in Head Start into public schooling.

Television

To warn about the effects of television upon literacy is nothing new. The comment of one Missouri teacher reflects the concerns of most educators: "The majority of the 7th graders I teach do not read on their own. . . . Our society makes everything readily available to them by switching on a TV. They are entertained, informed and even baby-sat by this machine." Many fear television produces passive spectators increasingly unable to sustain the necessary concentration for reading.

On the other hand, the high quality of programs presented on public television, Sesame Street in particular, demonstrates the medium's potential for challenging and informing adults and children alike. In her recent report, Humanities in America, Lynne Cheney, chair of the National Endowment for the Humanities, points to television as a "potent force available for rescuing" quality books such as West with the Night and Brideshead Revisited. When television adaptations aired, sales of both books increased dramatically.

We conclude that television can be a force for promoting education and literacy but only if used very selectively, especially among preschool children. Parents should not use television to baby sit or pacify children but to complement children's education with high-quality programs that stir the imagination and encourage exploration beyond the program.

Graduates

The Council believes a recipient of a high school diploma should have acquired at least the basic skills. However, literature strongly suggests this is not the case. Five percent of respondents to the Business Survey said a high school diploma is of "no" value as evidence that a graduate has necessary basic skills and 58% said it was only of "some" value. The high school diploma is cheapened by being awarded to virtually everyone without regard to basic skill attainment.

But can the attainment of basic skills be measured? Seventy-nine percent of respondents to the Business Survey believe a standard test could be developed which would accurately test basic skills. Preferably, levels of competency measured by a test should be tied to the minimum requirements of jobs in the near future.

The Council supports awarding a diploma that indicates whether or not students have passed such a competency test. It is important that a distinction be made between graduates so that the school system is not responsible for perpetrating a fraud by misrepresenting to society as a whole and employers in particular that all recipients of a diploma have basic skills.

DESE should develop a set of competencies needed by students to enter Missouri's workforce along with developing the means to measure these competencies. While this measurement might take the form of a test, other means should be explored.

Action Plan 15: School districts should administer a competency test in the 12th grade and award a competency-based diploma to students who pass. To accompany this competency testing, further prevention programs focusing on basic skills should be developed well before testing time.

The Council is concerned, though, that those who fail the competency test would be "branded" and placed at a significant disadvantage in the job market and in coping with life in general. However, we believe that the positive aspects of such a program would outweigh the negative and would more honestly represent student skill levels to society. This program would clearly identify students who do acquire necessary basic skills and, therefore, motivate some students to acquire basic skills required to receive a competency-based diploma.

The Council realizes that minimum-competency testing can itself create a new reason for dropping out. This would call for dropout prevention programs emphasizing remediation in basic skills as well as those focusing on emotional and psychological factors. Competency testing cannot be utilized without the appropriate means to help students pass the test, and efforts at remediation must take place throughout a student's education. Though the Council realizes that further testing takes away classroom time and can produce "teaching to the test," we feel a minimum-competency test will help to ensure the education of high school graduates.

The cycle of disadvantage can be broken. Each year Missouri produces first-generation college graduates. The Council is optimistic that the same steps forward can be made in all areas of education.

RE-VALUING LIFELONG LEARNING

Analysts agree that fundamental structural changes are taking place in the world and in America. And while they may become most evident in the workplace, they affect all aspects of our lives. The following trends appear relevant:

1. The global economy, which has virtually taken shape, will hasten the emergence of a global community characterized by expanded interaction across geographical and cultural boundaries not only in business but also in fields such as art, music, entertainment, and education. Understanding and coping with the impact of such increased communication will require a fairly sophisticated level of literacy.
2. Timely information will increasingly become the "capital" or "raw material" of economic activity. Therefore, the ability to receive and transmit such information in spoken, written, or numeric form will become critical.
3. Technology will penetrate even deeper into our everyday life, becoming the driving force of economic activity. Being able to handle emerging technologies will require rather sophisticated levels of prose, document, and numeric literacy.
4. The rate of change in all areas of life, including the workplace, will accelerate. Those who have "learned how to learn" will be best equipped to react positively to rapid change. Since basic literacy skills are the fundamental tools employed by those who have "learned how to learn," success in adapting will require high-level literacy skills.

Derek Bok, the president of Harvard University, sums up the challenge in his book, Higher Learning, and points out some of the directions for change:

More and more, therefore, the United States will have to live by its wits, prospering or declining according to the capacity of its people to develop new ideas, to work with sophisticated technology, to create new products and imaginative new ways of solving problems. Of all our national assets, a trained intelligence and a capacity for innovation and discovery seem destined to be the most important.²⁷

Adult Basic Education

Adult Basic Education (ABE) programs in Missouri serve nearly 30,000 adults yearly, and 13-15% of the people completing their high school education each year do so by earning a high school equivalency certificate through ABE. ABE programs work with adults who are nonreaders, low-level readers, and those who cannot

understand what they've read even though they can decode the printed word. There is a great variety of grade levels among these adults--many have reached high school or even graduated. Some have learning disabilities. For some, English is a second language. ABE provides individualized instruction for all of these students; and all must pass the GED to receive their high school equivalency certificates.

ABE literacy programming is neighborhood-based, having the qualities of availability (time) and accessibility (place). Calls and referrals are funneled through a statewide literacy hotline operating in conjunction with the Missouri Literacy database. During 1987-88, the hotline dealt with 2,278 calls and requests. But the Council is very concerned that ABE is currently serving only 2% of the eligible population in Missouri. ABE coordinators continue to express the need for additional staffing to coordinate recruitment for a program that is often characterized as "the best kept secret."

Programs such as Parents as Teachers and Head Start frequently identify candidates for ABE but report that external barriers such as transportation and child care often block even the most motivated adult. Adult Basic Education has no funding for child care, and the Division of Family Services has only limited funding to pay for child care for parents involved in GED classes.

Locations of ABE classes in schools also serve as an obstacle. It takes great courage for adults to return to the place where they failed as children and admit the need to learn how to read. Those seeking basic-skills education must overcome the embarrassment, low self-image, and fear of failure that nonreaders often carry. A simple change of sites could help potential students overcome the humiliation of having to enter the classroom again. Therefore, we support the efforts of community organizations such as libraries, churches, and businesses who donate their facilities for use by Adult Basic Education programs or other literacy tutoring organizations.

A major barrier that ABE programs face is a lack of funds to meet the literacy needs of Missourians. Currently, there is only \$4 of state and federal funding for each of the over 1,300,000 adult Missourians who, according to the 1980 census, did not complete their high school education. This amount compares to \$3,000 in funding for each public school student and \$18,000 for each prisoner in Missouri. In fiscal year 1982, following a general yearly increase in total governmental funding, the amount of money allocated to Missouri's ABE program decreased. Over the next several years, as the funds continued to diminish, the number served also declined. Then in 1986, the number served increased again because the money was once again available to serve those individuals. The amount of funding provided by the state remained the same until an increase in 1986. This increase is very important and has proved very valuable in allowing the ABE directors to serve more of the Missourians in need.

Currently, the funding for ABE programs is determined by the number of contact hours made with students in designated facilities. ABE receives about \$1.90 per hour for each student (down from \$2.25 in 1978) while the average public school receives about \$5.00. This lack of funding creates problems for both programs with few potential students and those with too many.

In sparsely populated rural areas, it is difficult to recruit sufficient numbers of students to make a program cost effective. In most rural programs, the ABE director teaches 30 or more hours each week and must perform secretarial duties for the program to survive. And the programs still must seek additional sources of funding to supplement state and federal monies. In areas where students are plentiful, ABE programs do little or no advertising for fear that they would have to turn away students because there is not enough money to open new classes. And when recruits and community support are desired for any program, the sophisticated marketing approaches that are often necessary are too costly.

Because they are outside the social mainstream, too many Missourians (for example, the poor of the inner cities and rural areas) miss the opportunities for improvement in which others are involved. Because they are not often seen, they are easily ignored.

Action Plan 16: Missouri must keep track of citizens who lack basic skills to keep them involved in programs, to track their progress, and to ensure program success.

Accurate record keeping by programs and tracking procedures for Missourians will also provide the documentation that is often necessary to prove program effectiveness.

Action Plan 17: ABE programs should be organized by school districts to better serve qualified Missourians.

The Council believes that local school districts can best serve Missouri's literacy effort by upgrading current ABE programs. This means that ABE programs would no longer be merely a poor "stepchild" to more traditional K-12 programs. School districts should focus on the skill levels needed for future industry. Thus, instead of merely administering programs for kindergarten through 12th grade, school districts would be responsible for all training needed to meet the competency needs between K-12 grades. This means that school districts would be responsible for levels of competence (regardless of the age of the learner).

Lack of funding translates directly to low teacher pay. The pay scale for ABE teachers is 1/3 to 1/2 of what regular K-12 classroom teachers earn. Contract teachers are almost nonexistent in ABE programs because of the high cost; therefore, most ABE teachers are part-time and paid by the hour with few if any bene-

fits, thus eliminating a strong core of professionals and attracting fewer highly qualified teachers. Also, non-contract positions and payment only for contact hours does not allow for the money or time needed for teachers to stay knowledgeable on current research and innovations or to develop their own.

Even the volunteers used in ABE programs are not free. During the 1987-88 school year, over \$18,000 was spent on 36 volunteer-training workshops across the state. Obtaining good volunteers, training, organizing, supervising, and retaining them requires staff time and therefore costs money. When that support is unavailable or inadequate, the volunteers either leave the program or stay but do an inadequate job.

Action Plan 18: The State Legislature should provide an increase in funding and greater flexibility in funding for ABE to reach more of the eligible population, and to make classes more available.

Increased funding for ABE would allow for higher teacher salaries, competitive contracts, better training for volunteers, better and more teaching materials, and up-to-date uses of modern technology. A number of educators feel that computer systems can play a significant role in future basic-skills training, allowing for increased use of group instruction.

Additional funds should also be earmarked for child care during classes, the use of mobile programs for rural areas, and additional recruiters for each regional center.

ABE and other service groups should standardize their definitions of contact hours, expanding their definition to include instruction outside designated classrooms to allow for greater flexibility in reaching and meeting with students.

Volunteers

The shortage of volunteers for literacy tutoring is well documented, and Missouri has the programs in place for volunteer involvement. Many resources for volunteers and other forms of support exist in Missouri's vast network of civic and professional organizations such as Retired Teachers and Junior League. Moreover, community involvement brings the problem of literacy a little closer to home and, therefore, helps promote understanding and appreciation of the complexity of illiteracy. The Council also wants to encourage the voluntary spirit among young people. An exemplary project deserving replication currently operates through Rhodes College in Memphis, Tennessee. College students tutor 10th graders in the city schools, who tutor 7th graders, who tutor 4th graders. Such a program reveals the wisdom of giving students

who are lagging behind academically a sense of accomplishment as they help the younger students. Just as important, the college students experience the problems of disadvantaged students first hand.

Action Plan 19: Community organizations should make literacy a top priority by encouraging their members to serve as volunteers and by directing their charitable giving to literacy organizations. Colleges and universities should provide incentives for students to volunteer for tutoring those in need.

This recommendation is not made without a keen awareness that simply increasing the number of volunteers will not solve the problem. We know that literacy organizations desperately need more paid staff in order to coordinate and train volunteers.

Missouri owes much to Laubach volunteers and other volunteers in the literacy effort. The approximately 2,100 volunteers currently tutoring over 2,300 students are providing an invaluable service in Missouri. If we use the very conservative figure of \$5.00 per hour of one-on-one attention to estimate the money saved, these tutors provided \$195,325 worth of service in the 1987-88 school year. And these figures reflect the activity of the 38 programs reporting to the Missouri Literacy Database--they do not include the service hours generated by volunteers but not reported.

But volunteers cannot solve the problem themselves, and volunteer organizations realize their limitations. One of the strengths of volunteer tutoring is one-on-one instruction, which provides the personal attention that adult students often need, but have not previously received; but this limits the number of students that can be served. And sometimes even personal attention is not enough. Educators report that from 10 to 90% of ABE students have physical disabilities--including hearing and sight impairments and learning disabilities. It is difficult for a volunteer with only 12 hours of training to work through such problems.

To capitalize on their one-to-one tutoring methods, volunteer groups need to evaluate students prior to instruction and carefully match students to tutors, taking into consideration scheduling, common interests, and common experiences. Tutors should work first on the most pressing of student's needs and create individualized lesson plans. In this way, literacy should be seen in the context of each student's life, directly relating basic skills with economic, social, and political empowerment. When the student's goal is separated from the act of learning to read, that student can easily become discouraged and disinterested, losing motivation and giving up.

Teaching methods should also take individual students into account. Because many students have not acquired reading skills through traditional schooling and traditional methods, alternative methods of reading instruction should be utilized. A number of sources suggest that students benefit when ABE programs encourage the use of teaching methods other than phonics-based approaches. The system would benefit if support and reimbursement for contact hours using other methods were encouraged.

Missouri cannot abandon its volunteers. Instead we must give them the support and information they need to do the best job of educating.

Jobs Skills and Business Involvement

One concern of the Council deals with the delivery systems currently in place. Delivery systems will be most beneficial when they have the ability to focus on specific individuals and specific jobs. Skill centers may be the appropriate delivery system for the future, and community colleges may be the appropriate places for these centers. Skill centers would function as "new strands" in the educational system.

One problem is deciding where the role of the public schools ends, and where private industry should take over. Public schools should know the point where they've done enough, where everything else needed for employment is idiosyncratic--in other words, where industry needs to do its own training. The workers of the future are now in the school system, but there is also a huge number of workers already in the workforce who will never return to the school system. These workers will continue to need education. At the present, each large employer provides an idiosyncratic system. If businesses "contracted out" needs to one program, they could both support the educational system and eliminate the redundant costs of each supporting an educational center.

The U.S. Council of State Planning Agencies reports that 75% of the nation's workforce for the next two to three decades is already in place. School reform and other projects focusing on young Missourians will not be able to reach most of the workers of the near future; therefore, expansion of ABE is necessary. A fully statewide delivery system would aid in communication between business and learning centers, and in standardizing the methods of delivery which presently vary radically from community to community. A statewide system would also help to consolidate spending. Material from the American Society for Training and Development suggests in four different reports that industry spends much more money than educational systems. Any way to combine some of this spending, to make the systems more cost effective, would only improve the bottom line for major employers. A clearinghouse for teachers (including those now retired) who wish to work for industry to improve basic-skills training would help in the implementation of such systems.

Action Plan 20: Community colleges and four-year institutions should focus additional resources on programs that meet the needs of adult learners, including the initiation of cooperative projects with industry.

The Council foresees an increasingly important role for community colleges in retraining workers for more sophisticated jobs. In short, a major goal of community colleges should be to jump into the business of promoting themselves as the training grounds for industry's needs.

Action Plan 21: In regions of the state not served by local community colleges, the State Legislature should establish skill centers to coordinate literacy needs and resources.

The Council recognizes that there is no one model for meeting the diversity of needs in all of Missouri's communities. Skills centers can be housed in a variety of locations, from public schools to community colleges to businesses. All areas of Missouri should have a number of sites for teaching basic skills to provide alternatives for learners.

Action Plan 22: The State Legislature should offer incentives for companies to upgrade existing employee basic skills. This may include public-relations campaigns or tax breaks for successful programs.

The business sector can be involved in education in the same ways as other community members, but business has advantages that others often do not. Businesses have an opportunity, in the forum of public education, to share their expertise with students who often cannot see the relationship between school and the working world. And businesses have an opportunity to invest in educational programs, activities, and materials that improve the education of students and prepare them for more effective involvement in their society. Business partnerships with schools are an excellent means of sharing resources. Two innovative examples include Ewing Kauffman, founder of Marion Laboratories and co-owner of the Kansas City Royals, and Gerald Greenwald, former St. Louisian and current Vice-Chairman of Chrysler Corporation. Both Kauffman and Greenwald have each "adopted" a high school and promised students who graduate and meet other criteria a free college education. Kauffman works with Westport High School in Kansas City and Greenwald with University High School in St. Louis. Encouraging work is already being done in this area, but the possibilities for business's role in education is limited only by the imagination of those willing to contribute.

Action Plan 23: Businesses should cooperate with schools in the education of students by sharing both their resources of money and expertise, especially through business/school partnerships.

Businesses and other workplaces must adopt policies that uphold the value of education and promote employees' involvement in their children's education. Establishing an ethos promoting education can take a number of forms: allowing leave for parents to participate in school activities and teacher-parent conferences; encouraging employees to run for school board; upholding the academic achievements of employees' children; sponsoring brown-bag lunches with educators and other professionals concerned with children's development; and involving employees in volunteer activities on behalf of schools and preschool programs.

The Council strongly believes that resources are currently available--but woeful lack of communication has prevented this partnership from flowering.

Action Plan 24: The Department of Elementary and Secondary Education should establish regional roundtables to bring together businesses and school districts.

Regional roundtables would provide a much-needed forum for communication between business and education. Business leaders would learn about the real world of schools, and educators would learn what skills and abilities are prized by the business community. Armed with this knowledge, business can provide schools with the added resources and personnel to help schools better educate their students and schools can better evaluate the need for instructional changes.

The Council believes that businesses and nonprofit organizations have a stake in literacy that extends beyond workplace literacy. The workplace can make a difference in the attitudes of its employees and provide practical assistance for educational programs in general.

Action Plan 25: Large businesses and corporations should support employer-involved child-care centers to alleviate the alarming dearth of child care facilities.

Adequate child care promotes productivity and reduces absenteeism. Larger businesses and corporations are encouraged to pool their resources and involve smaller businesses and nonprofit organizations unable to establish their own programs.

Learnfare/Welfare-to-Work

The Council's primary goal for all Missourians is interdependence, but the current welfare system too often promotes dependence, and breaking out of the cycle of dependence is very difficult. One solution is Missouri's Learnfare/Welfare-to-Work program. The goals of the program are:

- 1) to boost the educational level and job potential of AFDC parents who lack high school diplomas by requiring registration in ABE/GED or equivalent high school programs, exempting only those with preschool children or special hardships,

2) to open new job opportunities for AFDC parents through mandatory registration for job skills, job search, job experience, and job placement programs and through individually tailored guidance by assigned case managers,

3) to expand day care to help AFDC parents get maximum benefit from the new education and employment opportunities,

4) to provide a new Community Work Experience program to provide on-the-job work experience to those who are unsuccessful in the education, training, and job-search components of the program.

The welfare system carries with it many controversies, and changes to that system are often controversial as well; the Council believes that something must be done to improve the current situation. Missouri's Learnfare/Welfare-to-Work program is one means for improvement. We realize, though, that this program, like many others, will fail in its goals if the appropriate funding and expertise is not provided. Evaluation, considering both the quantity and quality of education and work experiences, is also necessary to ensure that this program does not simply prepare Missourians for dead-end, minimum-wage jobs, keeping them in dependent roles.

Action Plan 26: The State Legislature should fully implement Missouri's Learnfare/Welfare-to-Work program, along with the appropriate funding and evaluative procedures.

Education in the Prisons

After the at-risk cycle has already begun, remediation rather than prevention becomes necessary. And when people do not succeed, or when the regular channels are not accessible to them, there must be alternatives. One such group of those needing alternatives are Missouri's approximately 12,000 prisoners.

While this Council acknowledges that literacy problems are only one of a complex array of disfunctions that lead to a life of crime, it is nonetheless a very important barrier to success in this society and plays a large part in a person's original entry into crime and also plays a critical role in rehabilitation.

U.S. statistics show that over 40% of the arrests made for serious crimes were of people under age 18.1 In Missouri, as well as in the rest of the U.S., the high rate of criminal activity correlates with failure in school; without basic skills, dropouts often turn to illegal means for income.

Eighty-five percent of the people in Missouri's prisons are not high school graduates. Missouri inmates average 10.5 years of schooling, and forty percent of the inmates entering the corrections system have literacy skills at or below the 6th grade level.

Action Plan 27: Prison authorities should provide sufficient instruction so that 90% of those inmates categorized as functionally illiterate achieve an eighth grade level of literacy before they are released from incarceration, and inmates should be required to earn a General Equivalency Diploma before they can be granted parole.

Since 40% of those interned each year in Missouri prisons are categorized as functionally illiterate, this goal means that in a given year 2,500 prisoners would need to receive instruction so that they can function at the eighth grade level of literacy.

English as a Second Language

Having a native language other than English marks another group of students who have a higher risk of dropping out, another group of Missourians who have an obstacle to literacy. Among the large number of immigrants to Missouri for whom English is a second language are many who are not literate in their native language. Literacy in both English and their native language is important to their development as interdependent citizens.

The Executive Summary of the Report on the greater Kansas City Hispanic Needs Assessment gives the results of a survey of Hispanics and agencies serving Hispanics in the Kansas City metropolitan area. Hispanics make up 2.4% of the population of the seven county area (in Missouri and Kansas). The following summarized responses share many of the same concerns cited previously in this report:

- * Education is a key determinant of future progress.
- * Teenage pregnancy and alcohol and drug abuse are considered major community problems and the reasons that many drop out of school. Services addressing these problems need to be expanded.
- * Residents tend to see community problems as caused by themselves and their community, rather than simply caused by service institutions.
- * The Hispanic community is concerned about high unemployment, among youth and adults.
- * There is a shortage of low-cost day care.
- * Single-parent families, women, elderly living with children, veterans, and youth 16-21 are poorly served.
- * Hispanic leaders believe that limited education/literacy is a major cause of low rates of voter participation.²

Action Plan 28: An ESL component should be made available for the certification of Missouri teachers.

At present, certification endorsements for ESL are not provided. Thus, little encouragement is given for students desiring additional training in English as a Second Language. The availability of an endorsement in no way requires all educators to have ESL training, but it would provide support for existing programs and ensure an education for a population of students. At the same time, an endorsement sets up the machinery for establishing more complete ESL programs.

es

Literacy in Missouri

Robert F. Arnove and Harvey J. Graff, "National Literacy Campaigns: Historical and Comparative Lessons," Phi Delta Kappan (Nov., 1987), 202.

Ibid.

4. Ibid. 203

5. Joel Spring, Educating the Worker Citizen: The Social, Economic, and Political Foundations of Education (New York: Longman, 1980), 41.

6. Arnove and Graff. 206.

7. Jeanne S. Chall, Elizabeth Heron, and Ann Hilferty, "Adult Literacy: New and Enduring Problems," Phi Delta Kappan (Nov., 1987), 190.

8. Arnove and Graff. 203.

9. William B. Johnston, Workforce 2000: Work and Workers for the 21st Century (Indianapolis: Hudson Institute, June 1987), xxvii.

10. The Bottom Line (Washington, D.C.: U.S. Department of Labor and U.S. Department of Education, 1988), 5.

11. Ibid.

12. Ibid.

13. Johnston. 98.

The Foundations of Literacy

1. Andrew Hahn, Jacqueline Danzberger, and Bernard Lefkowitz, Dropouts in America: Enough Is Known for Action, Washington, D.C.: Institute for Educational Leadership (March, 1987).

2. Lisbeth Schorr, Within Our Reach: Breaking the Cycle of Disadvantage (Garden City, NY: Anchor/Doubleday, 1988), *.

3. Children in Need: Investment Strategies for the Educationally Disadvantaged (*), 21.

Literacy and Society

1. Realities: Educational Reform in a Learning Society, American Library Association (*), *.

- Thomas Sticht, Speech given at Missouri 2000 (Nov. 1988).
- . Gordon Berlin and Andrew Sum, Toward a More Perfect Union: Basic Skills, Poor Families, and Our economic Future (New York: Ford Foundation, 1988), 16.
- . William T. Grant Foundation Commission on Work, Family and Citizenship, The Forgotten Half: Non-College Youth in America (Washington, D.C.: Youth and America's Future: The William T. Grant Foundation Commission on Work, Family and Citizenship, 1988), 18.
5. See Jeylan T. Mortimer and Michael D. Finch, "The Effects of Part-time Work on Adolescent Self-Concept and Achievement," Becoming a Worker, ed. Kathryn M. Borman and Jane Reisman (Norwood, NJ: Ablex, 1986).
6. Dale Mann, "Can We Help Dropouts: Thinking about the Undoable," Teachers College Record (vol. 87 no. 3 [Spring 1986]), 3.
7. Berlin and Sum. 20.
8. Ibid. 9-10.
9. Ibid. 23, 55.
10. NCTE News Release (13 Feb. 1989)
11. Carnegie Council on Policy Studies in Higher Education, Giving Youth a Better Chance: Options for Education, Work, and Service (San Francisco: Jossey-Ball, 1979), 49.
12. Berlin and Sum. 16-19.
13. Missouri Department of Elementary and Secondary Education, "Who Is Tomorrow's Dropout?: 16 Warning Signs for Educators" (December 1987).
14. Tim O'Connor, "Dropouts Forfeit Their Future," Kansas City Times (23 May, 1988), A-6.
15. Robert Signor, "Births on Rise among Area's Single Women," St. Louis Post Dispatch (8 Jan., 1985), 1, 4.
16. O'Connor. A-6.
17. Children's Defense Fund, Model Programs: Preventing Adolescent Pregnancy and Building Youth Self-Sufficiency (Washington, D.C.: Children's Defense Fund, 1986), cited in Asta M. Kenney, "Teen Pregnancy: An Issue for Schools," Phi Delta Kappan (1987), 733.
18. William T. Grant Foundation. 6.

1. Deborah Burnett Strother, "Preschool Children in the Public Schools: Good investment? Or Bad?" Phi Delta Kappan (1987), 306.
2. See Missouri Department of Elementary and Secondary Education, "The Missouri Plan for Literacy Advancement" (Missouri DESE 1987), 8.
3. Right from the Start: The Report of the NASBE Task Force on Early Childhood Education (Alexandria: NASBE, 1988), 3.
4. Ibid. 4.
5. Ibid.
6. "Missouri Plan." 10.
7. Robert E. Bartman, "Family Plays Vital Role in a Child's Education," Kansas City Star (15 Feb., 1989), editorial page.
8. "Parent Involvement: What Your PTA Can Do" (Chicago: National PTA, 1987), 1.
9. Derek Bok, Higher Learning (Cambridge: Harvard UP, 1986), 5.

Re-Valuing Lifelong Learning

1. U.S. Bureau of the Census, Statistical Abstracts of the United States: 1988 (Washington, D.C.: Bureau of the Census, 1987), 165.
2. Executive Summary: Report on the Greater Kansas City Hispanic Needs Assessment (Kansas City: Greater Kansas City Community Foundation and Affiliated Trusts, 1988), 2-5.

Works Cited

- Cher Edith L., and Judith H. Dresden. "A New Kind of Dropout: The Effect of Minimum Competency Testing on High School Graduation in Texas." Education and Urban Society. May, 1987. 19.3: 269-79.
- Conover, Robert F., and Harvey J. Graff. "National Literacy Campaigns: Historical and Comparative Lessons." Phi Delta Kappan. Nov., 1987. 202-06.
- Cartman, Robert E. "Family Plays Vital Role in a Child's Education." Kansas City Star. 15 Feb., 1989. Editorial page.
- Merlin, Gordon, and Andrew Sum. Toward a More Perfect Union: Basic Skills, Poor Families, and Our Economic Future. New York: Ford Foundation. Feb., 1988.
- Bok, Derek. Higher Learning. Cambridge: Harvard UP. 1986.
- The Bottom Line. Washington, D.C.: U.S. Department of Labor and U.S. Department of Education. 1988.
- Carnegie Council on Policy Studies in Higher Education. Giving Youth a Better Chance: Options for Education, Work, and Service. San Francisco: Jossey-Ball. 1979. 49.
- Chall, Jeanne S., Elizabeth Heron, and Ann Hilferty. "Adult Literacy: New and Enduring Problems." Phi Delta Kappan. Nov., 1987. 190-96.
- Children in Need: Investment Strategies for the Educationally Disadvantaged.
- Children's Defense Fund. Model Programs: Preventing Adolescent Pregnancy and Building Youth Self-Sufficiency. Washington, D.C.: Children's Defense Fund. July 1986. Cited in Asta M. Kenney. "Teen Pregnancy: An Issue for Schools." Phi Delta Kappan. June, 1987. 728-36.
- Executive Summary: Report on the Greater Kansas City Hispanic Needs Assessment. Kansas City: Greater Kansas City Community Foundation and Affiliated Trusts. 1988.
- Hahn, Andrew, Jacqueline Danzberger, and Bernard Lefkowitz. Dropouts in America: Enough Is Known for Action. Washington, D.C.: Institute for Educational Leadership. March, 1987.
- Johnston, William B. Workforce 2000: Work and Workers for the 21st Century. Indianapolis: Hudson Institute. June. 1987.
- Mann, Dale. "Can We Help Dropouts: Thinking about the Undoable." Teachers College Record. 87.3 (Spring 1986): 307-23.

Missouri Department of Elementary and Secondary Education. "The Missouri Plan for Literacy Advancement." Missouri DESE. Feb., 1987.

Missouri Department of Elementary and Secondary Education. "Who Is Tomorrow's Dropout?: 16 Warning Signs for Educators." December 1987. For more information contact: Joan Solomon, Director, Urban Education Section, Phone: 314/751-2931.

Missouri Opportunity 2000 Commission. Missouri 2000: The State of the Future.

Portimer, Jeylan T., and Michael D. Finch. "The Effects of Part-time Work on Adolescent Self-Concept and Achievement." Becoming a Worker. Ed. Kathryn M. Borman and Jane Reisman. Norwood, NJ: Ablex. 1986.

National Council Teachers of English. News Release. 13 Feb., 1989.

O'Connor, Tim. "Dropouts Forfeit Their Future." Kansas City Times 23 May, 1988. A-1, A-6, A-7.

"Parent Involvement: What Your PTA Can Do." Chicago: National PTA. 1987.

Right from the Start: The Report of the NASBE Task Force on Early Childhood Education. Alexandria: NASBE. 1988.

Realities: Educational Reform in a Learning Society. American Library Association.

Schorr, Lisbeth. Within Our Reach: Breaking the Cycle of Disadvantage. Garden City, NY: Anchor/Doubleday. 1988.

Signor, Robert. "Births on Rise among Area's Single Women." St. Louis Post Dispatch. 8 Jan., 1985: 1, 4.

Spring, Joel. Educating the Worker Citizen: The Social, Economic, and Political Foundations of Education. 1980.

Sticht, Thomas. Speech given at Missouri 2000. Nov., 1988.

Strother, Deborah Burnett. "Preschool Children in the Public Schools: Good Investment? Or Bad?" Phi Delta Kappan. 1987. 304-08.

U.S. Bureau of the Census. Statistical Abstracts of the United States: 1988. 108th ed. Washington, D.C.: Bureau of the Census. 1987.

William T. Grant Foundation Commission on Work, Family and Citizenship. The Forgotten Half: Non-College Youth in America. Washington, D.C.: Youth and America's Future: The William T. Grant Foundation Commission on Work, Family and Citizenship. Jan., 1988.

APPENDIX

RESTATEMENT OF RECOMMENDED ACTION PLANS

Action Plan 1: The Department of Health in cooperation with the Departments of Elementary and Secondary Education, Mental Health, and Social Services should expand the pilot project "First Steps" that it continues to grow in Missouri.

Action Plan 2: The "Caring Community," a coalition of the State Departments of Health, Education, Social Services, and Mental Health, should coordinate efforts to improve prenatal care especially among teen mothers.

Action Plan 3: By 1992, the State Legislature should provide the funding necessary to make the PAT program available to all eligible at-risk families.

Action Plan 4: Missouri's congressional delegation and lobbyists should work toward full implementation of Head Start to serve all eligible families by 1995.

Action Plan 5: The State Board of Education should establish more specific state standards for school libraries, and state agencies which have responsibilities for pre-school child care services should encourage the use of book and library resources as part of the basic program requirement.

Action Plan 6: Libraries should coordinate efforts with local literacy training and/or ABE programs to provide better recruitment, alternate sites, and reading materials and should allocate a percentage of their money for literacy materials and services.

Action Plan 7: The State Legislature should increase funding for libraries to provide library service for geographic areas not currently served and to support the staffing needed to conduct activities in all libraries for preschool children and to assist adult literacy programs.

Action Plan 8: School districts should allow alternatives to basal readers and provide in-service programs that will enable teachers to determine materials and means that best foster the development of literacy.

Action Plan 9: The Department of Elementary and Secondary Education should mandate in Missouri's schools the dropout definition which states that dropouts are "persons neither enrolled in school or high school graduates." When a student disenrolls and does not request records within the first 20 days of the following quarter, the school should consider the student a dropout. Also, schools and school districts should collect data on dropout rates from the freshman year through graduation.

Action Plan 20: Community colleges and four-year institutions should focus additional resources on programs that meet the needs of adult learners, including the initiation of cooperative projects with industry.

Action Plan 21: In regions of the state not served by local community colleges, the State Legislature should establish skill centers to coordinate literacy needs and resources.

Action Plan 22: The State Legislature should offer incentives for companies to upgrade existing employee basic skills. This may include public-relations campaigns or tax breaks for successful programs.

Action Plan 23: Businesses should cooperate with schools in the education of students by sharing both their resources of money and expertise, especially through business/school partnerships.

Action Plan 24: The Department of Elementary and Secondary Education should establish regional roundtables to bring together businesses and school districts.

Action Plan 25: Large businesses and corporations should support employer-involved child-care centers to alleviate the alarming dearth of child care facilities.

Action Plan 26: The State Legislature should fully implement Missouri's Learnfare/Welfare-to-Work program, along with the appropriate funding and evaluative procedures.

Action Plan 27: Prison authorities should provide sufficient instruction so that 90% of those inmates categorized as functionally illiterate achieve an eighth grade level of literacy before they are released from incarceration, and inmates should be required to earn a General Equivalency Diploma before they can be granted parole.

Action Plan 28: An ESL component should be made available for the certification of Missouri teachers.